AMENDMENTS TO THE CLAIMS

1-21. (Canceled)

22. (Currently Amended) A process for isolating ~~and~~ and/or identifying at least one active chemical substance from a non-equimolar mixture of active or inactive chemical substances, comprising the steps:

a) adding a target to said mixture and forming a complex comprising the target and at least one active chemical substance of the mixture;

b) separating the complex from the inactive chemical substances of the mixture by ultrafiltration or ultracentrifugation; and either

c) liberating, isolating and identifying at least one active chemical substance from the separated complex; or

d) identifying at least one active chemical substance of the mixture by subtracting from a chromatogram of the mixture of active and inactive chemical substances a chromatogram of the mixture of inactive chemical substances which is obtained after separation of the complex.

23. (Previously Presented) The process according to claim 22, wherein the adding of the target to said mixture is performed in a solution, a suspension or a dispersion.

24. (Previously Presented) The process according to claim 22, wherein the adding of the target to said mixture is performed in an aqueous solution.

25. (Previously Presented) The process according to claim 24, wherein a pH value of the aqueous solution is stabilized with the aid of a buffer.

26. (Previously Presented) The process according to claim 22, wherein said complex is created by a bond between the at least one active chemical substance and the target.

27. (Currently Amended) The process according to claim 22, wherein ~~the bond~~ a bond between the target and the at least one active chemical substance is a covalent or non-covalent bond.

28. (Currently Amended) The process according to claim 22, wherein ~~the non-covalent bond~~ a non-covalent bond between the target and the at least one active chemical substance is formed by hydrogen bridges, electrostatic interaction, metal complexation, interaction of lipophile groups of the active chemical substance with the target, dipole-dipole interactions, or cation-π interactions.

29. (Canceled)

30. (Currently Amended) The process according to claim 22, wherein said isolating and/or identifying ~~isolating and identifying~~ of the at least one active chemical substance of the separated complex is accomplished by at least one method selected from the group consisting of HPLC, electro-chromatography, electrophoresis and coupling techniques.

31. (Previously Presented) The process according to claim 22, wherein said identifying of the at least one active chemical substance of the mixture is accomplished by at least one method selected from the group consisting of HPLC, electro-chromatography, electrophoresis and coupling techniques.

32. (Previously Presented) The process according to claim 30, wherein said coupling techniques are LCMS or MS-MS.

33. (Previously Presented) The process according to claim 31, wherein said coupling techniques are LCMS or MS-MS.

34. (Previously Presented) The process according to claim 30, wherein said method is microcapillary or nano-HPLC.

35. (Previously Presented) The process according to claim 31, wherein said method is microcapillary or nano-HPLC.

36. (Currently Amended) A process for isolating ~~and~~ and/or identifying at least one active chemical substance from a non-equimolar mixture of active or inactive chemical substances, comprising the steps:

a) adding a target to said mixture and forming a complex comprising the target and at least one active chemical substance of the mixture;

b) separating the complex from the inactive chemical substances of the mixture by preparative HPLC, eletrochromatography or electrophoresis; and either

c) liberating, isolating and identifying at least one active chemical substance from the separated complex; or

d) identifying at least one active chemical substance of the mixture by subtracting from a chromatogram of the mixture of active and inactive chemical substances a chromatogram of the mixture of inactive chemical substances which is obtained after separation of the complex.

37. (Previously Presented) The process according to claim 22, wherein said mixture is a substance library obtained from synthetic or combinatorial chemistry, or an extract of a natural product.

38. (Previously Presented) The process according to claim 22, wherein said mixture is a chemically modified extract of a natural product.

39. (Previously Presented) The process according to claim 22, wherein said mixture is a mixture of various natural product extracts.

40. (Previously Presented) The process according to claim 22, wherein said mixture contains at least 50 different chemical substances.

41. (Previously Presented) The process according to claim 22, wherein the target is a protein.

42. (Previously Presented) The process according to claim 22, wherein the target is an enzyme, a receptor, an antibody, a biological membrane or a cell.

43. (Previously Presented) The process according to claim 22, wherein the target is selected from the group consisting of thrombin, trypsin and β2-adrenoreceptor.